# Letter from Alexander Graham Bell to Elsie Bell Grosvenor, October 24, 1895, with transcript

L. BIOGRAPHICAL MATERIAL. Copy of a letter written in long-hand by ALEXANDER GRAHAM BELL to his daughter. October 24, 1895. My dear little girl:

I was very glad to receive your note of the 19th instant — and hasten to send you a check for forty dollars ($40.00).

This will cover:—

The balance of your October allowance $10.00

Your November allowance $20.00

Your gymnasium suit $ 7.37

and leave you a balance for candy or anything else you like $ 3.63

$40.00

I want you to feel the responsibility of your own bills and pay them yourself. Now that you have the money pay yourself for the gymnasium suit.

I enclose a notice which has been sent to me concerning Acetylene gas — showing that Americans are about to produce it upon a commercial scale. Write to the Company on your own account and ask them to send you any publications they may have upon the subject — that is — if you want to follow the progress of events.

Perhaps you could obtain a sample of the Cubicle of Calcium employed and experiment with it in the Chemical Laboratory.

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I am sorry you did not send me your essay upon Carbon — for to my mind Carbon is the most wonderful substance upon earth — and I should have liked to have seen what you said about it. Just think of diamonds and soot — both unlike — and yet, in substance, the same — (pure carbon). In one form a valuable gem — in the other, worthless 2 Letter on Carbon. dirt! In one form hard and transparent, in the other soft and opaque — a very contradiction of properties!

We are familiar with the facts that invisible steam, fog, cloud, water, ice, and snow under different physical conditions and we need not wonder that nature plays strange pranks with Carbon too! It is too cold upon earth for Carbon liquid or gas, we must go to the sun for that.

Just as, upon earth invisible water vapor rising into the air cools into fog or clouds so, Carbon Vapor ascending in the Atmosphere of the sun cools into Carbon fog or cloud. But such a tremendous heat is required to volatilize Carbon that even the cooler Carbon clouds of the sun must be so hot as to shine with a dazzling brilliancy, and people now believe these clouds to be the chief source of the light we receive from the Sun! The most brilliant light we can produce upon earth (the electric “arc” light) proceeds from carbon particles intensely heated by electrical means. While hot carbon filaments in a vacuum-tube constitutes the so-called “Incandescant Lamp”.

Even the light of an ordinary gas-flame, lamp, or candle is due largely to the presence of solid white-hot carbon particles in the flame.

A flame without carbon or other solid particles in it burns blue and gives forth very little light. Carbon is the great light-producer of the universe.

I better stop right here for I find myself drifting into a lecture upon some of the curious properties of Carbon — a lecture more easier begun than ended.

Already I see ahead chapters upon Carbon in its relation to 3 telephonic and radiophonic work. Chapter without ends and will stop at once. Good-bye Carbon.

I wish you could join Daisy's Sheakespeare Class. We are reading through the Historical plays as condensed for reading by your Uncle David. We meet Thursdays and Saturdays at Mr. Kennans. The class is composed of Daisy, Maud and Ethel Macheen, Miss McDougall, Miss Bessie Marrne, and Miss Mary McCurdy.

Mamma has been hard at work for several days past on a paper for the club, which Daisy read for her last night. Toothache has kept me busy ever since I came until today. This morning Dr. Macheen put me out of my misery by extracting a large three pronged tooth —, one wrench and then all was over — peace and happiness once more.

Your loving father, ALEXANDER GRAHAM BELL.